

## AMENDMENTS TO THE CLAIMS

1. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising pulsing into a chamber containing a surface comprising a material selected from W, Ta, Cu, Ni, Co, Fe, Mn, Cr, V, Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics, and activated dielectrics a reducing gas selected from glyoxylic acid and imidazole at a temperature ranging from  $>60^{\circ}\text{C}$  to  $<260^{\circ}\text{C}$  so as to form a layer on the surface, wherein the layer comprises the metal.

2. **(Previously Presented)** An ALD process according to claim 1, wherein the reducing gas is glyoxylic acid.

3.-4. **(Cancelled)**

5. **(Currently Amended)** An ALD process according to claim ~~1~~3 wherein the surface is a pretreated metallic surface selected from W, Ta, tungsten nitride, tantalum nitride, and titanium nitride.

6. **(Currently Amended)** An ALD process according to claim ~~1~~3 wherein the surface is a metal selected from Cu, Ni, Co, Fe, Mn, Cr, V and Nb.

7. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising

providing a surface comprising a material selected from noble metals, W, Ta, Cu, Ni, Co, Fe, Mn, Cr, V Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics and activated dielectrics in a reaction chamber at a temperature ranging from  $>60^{\circ}\text{C}$  to  $<260^{\circ}\text{C}$ ;

pulsing a precursor for the metal into the chamber; and

pulsing into the chamber a reducing gas selected from glyoxylic acid and imidazole.

8. **(Original)** An ALD process according to claim 7 wherein the reducing gas is glyoxylic acid.
9. **(Previously Presented)** An ALD process according to claim 7 wherein the activated dielectric surface comprises at least one of thiol, sulfide, tetrasulfide, phosphine, phosphide or amine groups.
10. **(Previously Presented)** An ALD process according to claim 7 wherein the activated dielectric surface comprises thiol groups.
11. **(Previously Presented)** An ALD process according to claim 7 wherein the dielectric is selected from CVD polymers, organic-inorganic hybrids, and silicon or metals having an oxide-terminated surface.
12. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising
- providing a substrate in a reaction chamber;
- pulsing a precursor for the metal into the chamber at a temperature ranging from >60°C to <260°C; and
- pulsing glyoxylic acid into the chamber.
13. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is a metal  $\beta$ -diketonate compound.
14. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is a metal-hfac compound.
15. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is selected from Pd(hfac)<sub>2</sub>, Ru(hfac)<sub>2</sub>, Rh(hfac)<sub>2</sub>, Pt(hfac)<sub>2</sub>, Ir(hfac)<sub>2</sub>, Ir(acac)<sub>2</sub>, Pd(tmhd)<sub>2</sub>, Ru(tmhd)<sub>2</sub>, Rh(tmhd)<sub>2</sub>, Pt(tmhd)<sub>2</sub>, and Ir(tmhd)<sub>2</sub>.
16. **(Previously Presented)** An ALD process according to claim 12, wherein the metal is Pd.

17. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is Pd(hfac)<sub>2</sub>.